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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/668,949
Filing Date: September 23, 2003
Appellant(s): AHMED ET AL.

DAVID M. LOCKMAN
REGISTRATION NO. 34,214
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 06/16/2009 appealing from the Office action mailed 11/14/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|--------------|------------------|---------|
| 6,178,362 B1 | Woolard et al. | 01-2001 |
| 6,141,595 | Gloudeman et al. | 10-2000 |
| 6,161,103 | Rauer et al. | 12-2000 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 15, the limitation, *converting database instructions conforming to a common database access method in the computer statements to database queries*, was not described in the specification. As disclosed in the Specification (Page 15 Lines 7-8), *database instructions conforming to a common database access method* is converted to *database queries*. Nowhere in the Specification

indicates *database instructions conforming to a common database access method* is in the computer statements. Therefore, this limitation is examined in light of the Specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6-16 and 19-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Woolard et al. [USP 6,178,362 B1].

Regarding claim 1, Woolard teaches *a system for a building system application* (Abstract) comprising:

a database (FIG. 4, Col. 9 Lines 28-29);

a data provider interface configured

to convert database instructions conforming to a common database access method to database queries conforming to a database application programming interface (API) (In view of Woolard's teaching at Col. 3-Lines 60-62, Col. 7-Lines 35-44, Col. 8-Lines 26-28 and Lines 60-65, Col. 12-Lines 40-62, Col. 13-Lines 12-55, the Woolard's RTDB SERVER as in FIG. 4 is considered as being equivalent to the claimed *data provider interface*. The request specifying a point for data updates from the client application is considered as being equivalent to the claimed *database instructions*. The process of requesting/retrieving data updates of FIGS. 6-7 is considered as being equivalent to the claimed *common database*

access method. The request specifying a point for data updates is in accordance with process of requesting/retrieving data updates by following requesting steps to register the request using command Concentrator.RegisterPoints [lPointsDataCollection**pPoints]. The request specifying a point for data updates is changed to RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands to extract data updates specified by point ID. The RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands are considered as being equivalent to the claimed *database queries*. The RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands are in accordance with the subroutine Concentrator.UpdatePoint for collecting data updates as in Woolard's FIG. 7. The subroutine Concentrator.UpdatePoint is considered as being equivalent to the claimed *a database application programming interface (API) and to convert database responses to the common database access method* (In view of Woolard's teaching at Col. 9-Lines 29-33, Col. 9-Line 65→Col. 10-Line 14, Col. 13-Lines 39-41, Col. 13-Lines 51-55, data updates from the real-time database (Rtdb) is considered as being equivalent to the claimed *database responses*. The data updates from Rtdb received by the associated concentrator is transformed to subroutine PointsDataCollection.OnUpdatePoint with updated data such as MachineID, PtID, Value, Timestamp and Status values, wherein subroutine PointsDataCollection.OnUpdatePoint is in the process of requesting/retrieving data updates, which is considered as being equivalent to the claimed *common database access method*); and *an application infrastructure* (FIG. 4), the infrastructure comprising:

a system design converter configured to convert application definition data into computer statements that implement control logic of application definition data (The Woolard's teaching at Col. 14-Lines 9-27, Col. 6-Lines 23-54 indicates each site or building has a schema with data for rendering and navigating. The schema data of the sites and buildings, e.g., site name, building name, texture and DemandThreshold..., is considered as being equivalent to the claimed *application definition data*. The schema data of the sites and buildings is converted by FACILITY NAVIGATOR 42 as *system design converter* to detailed graphical representations for navigating, analyzing and locating energy or facility problems. Detailed graphical representations for navigating, analyzing and locating energy or facility problems as taught by Woolard implies *computer statements* such as a "GO TO" either in language form or symbol to navigate from a current viewing site to another site. The same with an "ANALYZING" to analyze the energy usage at a current viewing site, and "LOCATING" to retrieve energy usage at a current viewing building. These detailed graphical representations *implement* navigating, analyzing and locating energy or facility problems as *control logic* of schema data of the sites and buildings as *application definition data*);

a computer tool interface coupled to the system design converter, the computer tool interface configured to provide the system design converter with data from the database through the data provider interface (The teaching from Woolard at FIG. 2, Col. 5-Lines 52-53, Col. 5-Line 66→Col. 6-Line 2, Col. 6-Lines 23-54, Col. 8-Lines 26-32 and Col. 9-Lines 21-37 reads on the claimed limitation *a computer tool interface coupled to the system design converter*, e.g., ENERGY MANGER 40 coupled to the FACILITY NAVIGATOR 42, *the computer tool interface configured to provide the system design converter with data from the database through the data provider interface*, e.g., ENERGY MANGER 40 provides FACILITY NAVIGATOR 42 real-time energy usage from the Rtdb through the RTDB SERVER 102 to display a particular building as red);

an external program module interface coupled to the system design converter, the external program module interface configured to provide the system design converter with external program modules (The

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Woolard's teaching at FIG. 2, Col. 7-Lines 15-17 and Col. 6-Lines 37-40 reads on the claimed limitation *an external program module interface coupled to the system design converter, e.g., ALARM MANAGER 46 that is coupled to FACILITY NAVIGATOR 42, the external program module interface configured to provide the system design converter with external program modules, e.g., ALARM MANAGER 46 provides FACILITY NAVIGATOR 42 with alarms corresponding to events); and*

the system design converter being further configured to include the data obtained through the computer tool interface and the external program modules obtained through the external program module interface with the computer statements that implement the control logic of application definition data to generate a building system application (The FACILITY NAVIGATOR 42 includes real-time energy usage from ENERGY MANGER 40 to display a particular building as red. The FACILITY NAVIGATOR 42 further includes alarms corresponding to events as *external program modules* from ALARM MANAGER 46 as *external program module interface* as discussed above. The FACILITY NAVIGATOR 42 also includes *the computer statements that implement the control logic of application definition data* as discussed in *system design converter's* section and the purpose is to generate a building system application, e.g., to view real-time 2-D or 3-D representations of any facility in the physical plant, to analyze and locate energy or facility management problem at a site, or to generate a report (Woolard, Col. 6-Lines 26-30)).

Regarding claim 15, Woolard teaches a method for *supporting a building system application* (Abstract) comprising:

storing data in a database (FIG. 4, Col. 9 Lines 28-29);

converting application definition data into computer statements that implement control logic of the application definition data (The Woolard's teaching at Col. 14-Lines 9-27, Col. 6-Lines 23-54 indicates each site or building has a schema with data for rendering and navigating. The schema data of the sites and buildings, e.g., site name, building name, texture and

DemandThreshold..., is considered as being equivalent to the claimed *application definition data*. The schema data of the sites and buildings is converted by FACILITY NAVIGATOR 42 as *system design converter* to detailed graphical representations for navigating, analyzing and locating energy or facility problems. Detailed graphical representations for navigating, analyzing and locating energy or facility problems as taught by Woolard implies *computer statements* such as a "GO TO" either in language form or symbol to navigate from a current viewing site to another site. The same with an "ANALYZING" to analyze the energy usage at a current viewing site, and "LOCATING" to retrieve energy usage at a current viewing building. These detailed graphical representations *implement* navigating, analyzing and locating energy or facility problems as *control logic of* schema data of the sites and buildings as *application definition data*);

converting database instructions conforming to a common database access method in the computer statements to database queries conforming to a database application programming interface (API) coupled to the database to enable the instructions conforming to the common database access method to access the database (In view of Woolard's teaching at Col. 3-Lines 60-62, Col. 7-Lines 35-44, Col. 8-Lines 26-28 and Lines 60-65, Col. 12-Lines 40-62, Col. 13-Lines 12-55, the Woolard's RTDB SERVER as in FIG. 4 is considered as being equivalent to the claimed *data provider interface*. The request specifying a point for data updates from the client application is considered as being equivalent to the claimed *database instructions*. The process of requesting/retrieving data updates of FIGS. 6-7 is considered as being equivalent to the claimed *common database access method*. The request specifying a point for data updates is in accordance with process of requesting/retrieving data updates by following requesting steps to register the request using command Concentrator.RegisterPoints [IPointsDataCollection**pPoints]. The request specifying a point for data updates is changed to RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands to extract data updates specified by point ID. The RtdbRegistrar.GetStaticPointData,

RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands are considered as being equivalent to the claimed *database queries*. The RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands are in accordance with the subroutine Concentrator.UpdatePoint for collecting data updates in Rtdb as in Woolard's FIG. 7. The subroutine Concentrator.UpdatePoint is considered as being equivalent to the claimed *a database application programming interface (API) coupled to the database, and the purpose is to access the database*;

converting data responses from the database API to data responses conforming to the common database access method (In view of Woolard's teaching at Col. 9-Lines 29-33, Col. 9-Line 65→Col. 10-Line 14, Col. 13-Lines 39-41, Col. 13-Lines 51-55, data updates from the real-time database (Rtdb) is considered as being equivalent to the claimed *database responses from the database API*. The data updates from Rtdb received by the associated concentrator is transformed to subroutine PointsDataCollection.OnUpdatePoint with updated data such as MachineID, PtID, Value, Timestamp and Status values, wherein subroutine PointsDataCollection.OnUpdatePoint is in the process of requesting/retrieving data updates, which is considered as being equivalent to the claimed *data responses conforming to common database access method*);

obtaining external programs through an external program module interface (an alarm function is obtained from alarm management (The Woolard's teaching at FIG. 2, Col. 7-Lines 15-17 and Col. 6-Lines 37-40 reads on the claimed limitation *obtaining external programs through an external program module interface*, e.g., ALARM MANAGER 46 provides FACILITY NAVIGATOR 42 with alarms corresponding to events); and

generating building system applications by incorporating data obtained from the data responses conforming to the common database access method and the external program modules in the computer statements that implement the control logic of the application definition data (The FACILITY NAVIGATOR 42 includes real-time energy usage from ENERGY MANGER 40 to display a particular building

as red. The FACILITY NAVIGATOR 42 further includes alarms corresponding to events as *external program modules* from ALARM MANAGER 46 as *external program module interface* as discussed above. The FACILITY NAVIGATOR 42 also includes *the computer statements that implement the control logic of application definition data* as discussed in *system design converter's section* and the purpose is *to generate building system applications*, e.g., to view real-time 2-D or 3-D representations of any facility in the physical plant, to analyze and locate energy or facility management problem at a site, or to generate a report (Woolard, Col. 6-Lines 26-30)).

Regarding claims 2 and 16, Woolard teaches all of the claimed subject matter as discussed above with respect to claims 1 and 15, Woolard further discloses *the database is comprised of a plurality of databases* (Woolard, Col. 9 Lines 28-31).

Regarding claim 6, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 1, Woolard further discloses *web-based components configured to couple the computer statements that implement the control logic of the application definition data to another application over the Internet* (Woolard, Col. 9 Lines 38-44).

Regarding claim 7, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 5, Woolard further discloses *operating system communication components configured to couple the computer statements that implement the control logic of the application definition data to another application through an operating system* (As further taught by Woolard, each client PC 104, 106 or 108 may include client objects, which may be software applications being executed by the client PC (Woolard, Col. 9-Lines 38-44). The FACILITY NAVIGATOR 42 permits any user of the energy and facility management apparatus to analyze and locate energy at a site (Woolard, Col. 6-Lines 23-30). In view of Woolard's teaching of executing software applications by a client

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PC, *an operating system* such as Windows 95 and system calls of the operating system such as OPEN, READ, WRITE, CLOSE, EXEC as *operating system communication components* are inherited features of a conventional computer. Analyzing and locating energy at a site is considered as being equivalent to *another application*. In short, the Woolard's teaching reads on the limitations of claim 7: *operating system communication components configured to couple the computer statements that implement the control logic of the application definition data to another application through an operating system, e.g., system calls of an operating system are used to couple computer statements that implement the control logic of the application definition data such as "ANALYZING" and "LOCATING" to analyzing and locating energy application).*

Regarding claim 8, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 7, Woolard further discloses *the operating system communication components communicate through a Windows operating system* (e.g., system calls such as OPEN, READ, WRITE, CLOSE, EXEC are communicated through a conventional Windows operating system such as Windows 95).

Regarding claim 9, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 6, Woolard further discloses *the Web-based components couple the computer statements that implement the control logic of the application definition data to another application over the Internet through a customer web portal* (As taught by Woolard, clients PCs are connected to the system via the Internet (Woolard, Col. 4-Lines 48-51). Each client PC sends request for data to CENTRAL SERVER 102 using an Internet browser (Woolard, Col. 9-Lines 38-44 and Col. 8-Lines 54-65). The system 100 interfaces to and consolidates data from a variety of different systems having possible different data protocols into a CENTRAL DATA SERVER (Woolard,

Col. 8-Lines 40-45). The Internet browser with multiple features is considered as being equivalent to the claimed *Web-based components*. The CENTRAL SERVER 102 is considered as being equivalent to the claimed *a customer web portal*. The Woolard' teaching as discussed indicates the claimed limitation *the Web-based components couple the computer statements that implement the control logic of the application definition data to another application over the Internet through a customer web portal*, e.g., Internet browser couples "ANALYZING" and "LOCATING" statements to analyzing and locating energy application over the Internet through the CENTRAL SERVER 102).

Regarding claims 10 and 24, Woolard teaches all of the claimed subject matter as discussed above with respect to claims 1 and 15, Woolard further discloses *a configuration utility configured to develop a file structure representative of a building system and to associate configuration data with components identified in the file structure* (Woolard's FIG. 8 illustrates examples of various data structures utilized by the server (Woolard, Col. 14-Lines 5-7), wherein the location data structure represents a building system (Woolard, Col. 14-Lines 13-27) is developed. Woolard further discloses the location data structures includes a Tag variable containing a unique short name for the building, a Location ID variable containing a unique address of the location (building), a SiteID variable containing a unique address of the site... (Woolard, Col. 14-Lines 13-27). The unique short name for the building, unique address of the location (building) and unique address of the site as taught by Woolard are considered as being equivalent to the claimed *configuration data*. The Tag variable, Location ID variable and SiteID variable are considered as being equivalent to the claimed *components identified in the file structure*. In short, the Woolard's teaching as discussed indicates *a configuration utility configured to develop a file structure representative of a building system*, e.g., location data structure is developed for a building system, *and to associate configuration data with components identified in the file structure*, e.g., unique short name for the building, unique

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address of the location (building) and unique address of the site are associated with Tag variable, Location ID variable and SiteID variable).

Regarding claims 11 and 25, Woolard teaches all of the claimed subject matter as discussed above with respect to claims 1 and 15, Woolard further discloses *a data collector interface configured to couple external data sources to the database* (Woolard, FIG. 4).

Regarding claims 12 and 26, Woolard teaches all of the claimed subject matter as discussed above with respect to claims 11 and 25, Woolard further discloses *the data collector interface is configured to convert data from a native format for an external data source to a format that is compatible with the database structure* (Woolard, Col. 8 Lines 5-12).

Regarding claims 13 and 27, Woolard teaches all of the claimed subject matter as discussed above with respect to claims 12 and 26, Woolard further discloses *transaction services configured to generate instructions for the database API to store the converted data in the database* (Woolard, Col. 8 Lines 5-12).

Regarding claims 14 and 28, Woolard teaches all of the claimed subject matter as discussed above with respect to claims 11 and 27, Woolard further discloses *a scheduling service configured to activate the data collector interface to interrogate the external data sources for data to be stored in the database* (Woolard, Col. 8 Lines 5-25).

Regarding claim 19, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 15, Woolard further discloses the step of *coupling common components*

to the computer statements for implementing control logic of application definition data for communication support (Woolard, Col. 6 Lines 23-30).

Regarding claim 20, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 19, Woolard further discloses the step of *coupling the computer statements for implementing control logic of application definition data to another application through a Web-based component for communication over the Internet* (Woolard, Col. 7 Lines 15-25).

Regarding claim 21, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 19, Woolard further discloses the step of *coupling the computer statements for implementing control logic of application definition data to another application through an operating system communication component for supporting application communication through the operating system* (As further taught by Woolard, each client PC 104, 106 or 108 may include client objects, which may be software applications being executed by the client PC (Woolard, Col. 9-Lines 38-44). The FACILITY NAVIGATOR 42 permits any user of the energy and facility management apparatus to analyze and locate energy at a site (Woolard, Col. 6-Lines 23-30). In view of Woolard's teaching of executing software applications by a client PC, *an operating system* such as Windows 95 and system calls of the operating system such as OPEN, READ, WRITE, CLOSE, EXEC as *operating system communication components* are inherited features of a conventional computer. Analyzing and locating energy at a site is considered as being equivalent to *another application*. In short, the Woolard's teaching reads on the limitations of claim 21: *coupling the computer statements for implementing control logic of application definition data to another application through an operating system communication component for supporting application communication through the operating system*, e.g., "ANALYZING" and "LOCATING" coupled to analyzing and locating energy

application through a system call such as EXEC for supporting communication of FACILITY NAVIGATOR 42 through a conventional operating system).

Regarding claim 22, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 21, Woolard further discloses the step of *coupling a Window-based communication component to the computer statements for implementing control logic of application definition data* (e.g., "ANALYZING" and "LOCATING" are coupled to a system call such as EXEC).

Regarding claim 23, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 20, Woolard further discloses *the communication through the Web-based component over the Internet is through a customer web portal* (As taught by Woolard, clients PCs are connected to the system via the Internet (Woolard, Col. 4-Lines 48-51). Each client PC sends request for data to CENTRAL SERVER 102 using an Internet browser (Woolard, Col. 9-Lines 38-44 and Col. 8-Lines 54-65). The system 100 interfaces to and consolidates data from a variety of different systems having possible different data protocols into a CENTRAL DATA SERVER (Woolard, Col. 8-Lines 40-45). The Internet browser is considered as being equivalent to the claimed *Web-based component*. The CENTRAL SERVER 102 is considered as being equivalent to the claimed *a customer web portal*. The Woolard' teaching as discussed indicates the claimed limitation *the communication through the Web-based component over the Internet is through a customer web portal*, e.g., Internet browser couples "ANALYZING" and "LOCATING" statements to analyzing and locating energy application over the Internet through the CENTRAL SERVER 102).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolard et al. [USP 6,178,362 B1] in view of Gloudeman et al. [USP 6,141,595].

Regarding claims 3 and 17, Woolard teaches all of the claimed subject matter as discussed above with respect to claims 2 and 15, Woolard further discloses *the database being comprised of a real-time database* (Woolard, Col. 9 Lines 28-31). The missing of Woolard is *a data mart*.

Gloudeman et al. teach *a data mart* a building system (Gloudeman et al., FIG. 2, HISTORICAL DATABASE).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the HISTORICAL DATABASE as taught by Gloudeman et al. into Woolard technique in order to keep track of historical data.

Claims 4, 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woolard et al. [USP 6,178,362 B1], Gloudeman et al. [USP 6,141,595] and further in view of Rauer et al. [USP 6,161,103].

Regarding claims 4 and 18, Woolard and Gloudeman et al., in combination, teach all of the claimed subject matter as discussed above with respect to claims 3 and 17, but fail to disclose *the data mart being configured in one of a snowflake and star data organization*.

Rauer et al. teach *star data organization* for the data mart (Rauer, Col. 7 Lines 5-20).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use star schema as taught by Rauer et al. for the data mart in order to organize the historical information.

Regarding claim 5, Woolard teaches all of the claimed subject matter as discussed above with respect to claim 1, Woolard further discloses *common components configured to support the application generated by the system design converter* (Woolard, FIG. 2, ENERGY MANAGER 40, FACILITY MANAGER 44).

(10) Response to Argument

Claim Rejections - 35 USC § 112

Claim 15 does not meet the written description requirement of 35 U.S.C. § 112, 1st paragraph.

As recited in Claim 15:

- (1) *A method for supporting a building system application comprising:*
- (2) *storing data in a database;*
- (3) *converting application definition data into computer statements that implement control logic of*
- (4) *the application definition data;*
- (5) *converting database instructions conforming to a common database access method in the*
- (6) *computer statements to database queries...*

As indicated in the Office Action 11/14/2008, claim 15 contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention.

Particularly, the step at lines 5-6, e.g., *converting database instructions conforming to a common database access method in the computer statements to database queries*, of claim 15 was rejected at least in view of the clause *in the computer statements*. This clause, e.g., *in the computer statements*, references to the clause *computer statements* of the step at lines 3-4, e.g., the *computer statements* from converted *application definition data*.

The specification of the current application does not describe that the *database instructions* for converting to *database queries* is in the *computer statements* from converted *application definition data*.

- The appellant does not agree with the rejection and argued (Appeal Brief, Page 11, Lines 10-21):

The data provider 20, which communicates with the data base management systems for database 18, forms a portion of this interface. Specification, page 22, line 21-23. The data provider 20 couples to applications through an application infrastructure, Specification, page 19, lines 5-10; FIG. 1A. The application infrastructure includes the design converter 58 that generates computer statements from application data received from the applications, Specification, page 20, lines 15-17 and page 20, line 23 to page 21, line 9. The data provider 20 is described as receiving database instructions from applications that conform to a common database access method instruction format and converts them into database queries that conform to the API for a particular database within database 18. Specification, page 23, lines 5-9. These common database access method instructions correspond to instructions in a common tool interface format because a database management system is a computer tool. Specification, page 21, lines 17-20. Thus, one of ordinary skill in the art would understand the Specification as describing the data provider 20 as being a portion of interface 60 that receives statements from converter 58 that include instructions conforming to a common database access method obtained from applications.

The examiner respectfully disagrees for at least the following reasons.

- (1) The examiner respectfully points out that all the pages and lines that were provided by the appellant as supportive evidences of the rejected limitation are not correct at least in view of the specification that was filed on 09/23/2003. For example, page 22, lines 21-23 does not describe that *data provider 20, which communicates with the data base management systems for database 18, forms a portion of this interface*. Page 19, lines 5-10 does not illustrate that *data provider 20 couples to applications through an application infrastructure*. The same with other provided pages and lines from the appellant.

For at least the reasons as pointed out by the examiner, claim 15 contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention.

(2) As disclosed in the specification of the current application on page 23 (lines 10-15), the topology of a HVAC system and the configuration data for the components of the system may be described with an XML schema. These data may be converted by system design converter 58 into computer statements for implementing the control logic of the application definition. As further disclosed on page 26 (lines 1-5) of the current application, data provider 20 receives database instructions from applications 30a-30n that conform to a common database access method instruction format and converts them into database queries that conform to the API for the particular database within database 18 that the application is attempting to access.

The specification of the current application in view of the disclosure on page 23 (lines 10-15) and page 26 (lines 1-5) does not disclose *database instructions conforming to a common database access method* for converting is in *the computer statements* that is from the converted *application definition data* such as the converted configuration data. The specification of the current application describes data provider 20 receives database instructions from applications 30a-30n. However, receiving instructions from applications 30a-30n does not imply that the received instructions are in the computer statements created from application definition data such as configuration data.

Therefore, one of ordinary skill in the art would not understand the Specification as describing the data provider 20 that can receives computer statements for implementing the control logic of the application definition from converter 58 and the received computer statements includes instructions conforming to a common database access method as asserted by the appellant.

- As further argued by appellant (Brief, Page 12):

the Examiner's basis for this ground of rejection is not identified in any office action. This ground of rejection first appeared in the office action mailed August 5, 2008 and reiterated in the final office action mailed November 14, 2008. In these documents, the Examiner fails to identify what claim 15 covers as whole, does not compare the scope of the claim with the scope of the description in the specification, and does not discuss whether sufficient written description exists to inform a skilled artisan that the Applicants were in possession of the claimed invention as a whole as of the time of the filing of the application. See MPEP 2163 II, A, 1, 2, and 3.

The examiner respectfully disagrees.

The examiner Hung Pham, who processed the Final Actions 08/05/2008 and 11/14/2008, inherited the case from examiner Olubusola Oni. The claims, especially claim 15, were amended throughout the process of examination, and the limitation *converting database instructions conforming to a common database access method in the computer statements to database queries* of claim 15 was rejected as indicated in the Office Actions 08/05/2008 and 11/14/2008 in view of the amended claim 15 filed on 04/28/2008 and the original claim 15 filed on 09/23/2003.

In the Office Actions 08/05/2008 and 11/14/2008, the examiner Hung Pham respectfully pointed out that the specification of the current application does not disclose *database instructions conforming to a common database access method* for converting is in the *computer statements* that is from the converted *application definition data*. The scope of claim 15 and the scope of the description in the specification were compared and discussed as indicated in the section "Response to Arguments" of Office Action 11/14/2008.

Therefore, the rejection of the limitation *converting database instructions conforming to a common database access method in the computer statements to database queries* of claim 15 under 35 U.S.C. § 112, 1st paragraph, was appropriate at least in view of the reasons as discussed.

Claim Rejections - 35 USC § 102

1. Regarding the rejection of claim 1 under 35 U.S.C. § 102(b), appellant's arguments will be discussed as following.

- As argued by appellant (Brief, Pages 12, Line 27-Page 13, Line 4):

With regard to claim 1, claim 1 requires:

a data provider interface configured to convert database instructions conforming to a common database access method to database queries conforming to a database application programming interface (API) and to convert database responses to the common database access method.

This data provider interface converts database instructions conforming to a common database access method to database queries conforming to a database API. The Examiner asserts that the RTDB server 102 in Woolard is such a data provider interface. The RTDB server 102 is not disclosed as converting database instructions conforming to a common database access method to queries for a particular database API. Such a conversion appears unnecessary from the teachings of the Woolard reference because all the servers use the same registry and data structures to communicate data in the system.

The examiner respectfully disagrees.

Firstly, the examiner respectfully points out that the features in the appellant' assertion with respect to the Woolard's teaching, i.e., *The RTDB server 102 is not disclosed as converting database instructions conforming to a common database access method to queries for a particular database API*, are not in the claim. Claim 1 requires *queries conforming to a database application programming interface (API)*. Claim 1 does not require *queries for a particular database API* as commented by the appellant. The requirement of claim 1, i.e., *queries conforming to a database application programming interface (API)*, is totally different from the appellant's requirement.

Secondly, the examiner respectfully points out that the appellant's comments, i.e., *[s]uch a conversion appears unnecessary from the teachings of the Woolard reference because all the servers use the same registry and data structures to communicate data in the system*, do not relate to the features as recited in claim 1.

For at least the reasons as discussed above, the examiner respectfully refuses to answer to those arguments and comments regarding features not in the claim.

- As further argued by appellant (Brief, Page 13, Lines 4-17):

*The Examiner attempts to equate the MachineID and PointID identifiers for a device with a common access method and IPointsDataCollection**pPoints with a particular database API. These terms, however, are used by a client object to register for data from a particular device. Woolard, col. 12, lines 40-62. Once registered to receive data from a particular point, data updates are provided automatically. Woolard, col. 13, line 63 to col. 14, line 4. The data structures are common across the databases and gateways, see Woolard, col. 14, line 5 to col. 15, line 24, and no mention is made of conversion from a common database access method to a particular database API. Thus, even in implementations of Woolard that have multiple databases, each one uses the same data structures and the same registry of clients for data access. Woolard, col. 8, lines 13-25 and col. 10, lines 23-41. Thus, the Examiner has failed to prove that Woolard discloses a data provider that converts database instructions conforming to a common database access method to database queries conforming to a database API.*

The examiner respectfully disagrees.

(a) The appellant cited a plurality of Woolard's teaching and commented that *no mention is made of conversion from a common database access method to a particular database API with respect to those cited teachings from Woolard. Again, the examiner respectfully points out that the features in the appellant' comment, i.e., conversion from a common database access method to a particular database API, are not in the claim.*

Claim 1 requires a conversion of *database instructions conforming to a common database access method to database queries conforming to a database application programming interface (API)*. Claim 1 does not require *conversion from a common database access method to a particular database API as commented by the appellant*. The requirement of claim 1, i.e., *conversion of database instructions conforming to a common database access method to database queries conforming to a database application programming interface (API)*, is totally different from the appellant's requirement.

Again, the examiner respectfully refuses to answer the appellant's comment regarding features not in the claim.

(b) Regarding the appellant's conclusion that *the Examiner has failed to prove that Woolard discloses a data provider that converts database instructions conforming to a common database access method to database queries conforming to a database API*, the examiner respectfully disagrees.

Woolard discloses an energy and facility management system (Woolard, Col. 3-Lines 60-62). At a particular building of the Woolard's energy and facility management system, a user executing client application may query one or more servers and receive data (Woolard, Col. 7-Lines 35-44). As shown in Woolard's FIG. 4 is the details of a real-time data retrieval and dissemination system (Woolard, Col. 8-Lines 26-28). According to Woolard's FIG. 4, the central server connects to one or more client personal computers (client PC) and one or more gateways that connect to one or more devices (Woolard, Col. 8-Lines 60-65). As shown in Woolard's FIG. 6 is the process of requesting data updates (Woolard, Col. 12-Lines 40-42). As shown in FIG. 7 is the process of retrieving updated data (Woolard, Col. 13-Lines 39-41). According to the requesting process of Woolard's FIG. 6, a particular client application may become registered to receive data updates from a particular point/device by specifying the points from which the client application wants to receive data. The specified points are stored in IPointsCollection data structure (Woolard, Col. 12-Lines 40-48). A subroutine is called to register the request with an associated concentrator by the command `Concentrator.RegisterPoints [IPointsDataCollection**pPoints]` (Woolard, Col. 12-Lines 57-62). The associated concentrator generates `RtdbRegistrar.GetStaticPointData`, `RtdbRegistrar.GetDynamicPointData` and `RtdbRegistrar.Subscribe` commands for receiving any updates to the point data (Woolard, Col. 13-Lines 12-20). According to the retrieving updated data of Woolard's FIG. 7, subroutine `Concentrator.UpdatePoint` is called by Rtdb server to

collect data updates (Woolard, Col. 13-Lines 39-46). To provide the update to the registered client, subroutine PointsDataCollection.OnUpdatePoint is called to update MachineID, PtiID, Value, Timestamp and Status values in the appropriate variables (Woolard, Col. 13-Lines 51-55).

In view of Woolard's teaching as discussed above, the Woolard's RTDB SERVER as in FIG. 4 is considered as being equivalent to the claimed *data provider interface*. The request specifying a point for data updates from the client application is considered as being equivalent to the claimed *database instructions*. The process of requesting/retrieving data updates of FIGS. 6-7 is considered as being equivalent to the claimed *common database access method*. The request specifying a point for data updates is in accordance with process of requesting/retrieving data updates by following required steps to register the request using command Concentrator.RegisterPoints [IPointsDataCollection**pPoints]. The request specifying a point for data updates is changed to RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands to extract data updates specified by point ID. The RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands are considered as being equivalent to the claimed *database queries*¹. The RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands are in accordance with the subroutine Concentrator.UpdatePoint for collecting data updates as in

¹ According to Microsoft Press Computer Dictionary, *Query: A specific set of instructions for extracting particular data repetitively.*

The Woolard's RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands are queries in view of the definition, e.g., the commands are used to extract data from the Rtdb repetitively according to Woolard' FIG. 6.

Woolard's FIG. 7. The subroutine Concentrator.UpdatePoint is considered as being equivalent to the claimed *a database application programming interface (API)*².

In short, Woolard's teaching as discussed reads on the claimed limitation *a data provider interface configured to convert database instructions conforming to a common database access method to database queries conforming to a database application programming interface (API)*, e.g., RTDB SERVER is configured to convert request specifying a point for data updates conforming to the process of requesting/retrieving data updates to RtdbRegistrar.GetStaticPointData, RtdbRegistrar.GetDynamicPointData and RtdbRegistrar.Subscribe commands conforming to subroutine Concentrator.UpdatePoint.

- As argued by appellant (Brief, Page 13, Lines 18-24):

Likewise, the Examiner has failed to show that Woolard teaches a data provider that converts database responses received from a database API to a common database access method. The only teaching in Woolard regarding the data from the devices is that the gateways convert these data into a standard format. Woolard, col. 8, lines 9-11. The devices, however, are not databases and the gateways are not data providers converting database responses to a common database access method. Thus, Woolard does not disclose the data provider as set forth in claim 1.

The examiner respectfully disagrees.

The examiner respectfully points out that the features: *database responses received from a database API* in the appellant' arguments, i.e., *the Examiner has failed to show that Woolard teaches a data provider that converts database responses received from a database API to a common database access method, are not in the claim. Claim 1 requires the claimed data provider configured to convert database responses*

² According to Microsoft Press Computer Dictionary Third Edition, *Application Programming Interface: A set of routines used by application program to direct the performance of procedures by the computer's operating system.* The Woolard's subroutine Concentrator.UpdatePoint is used by Rtdb Server to collect updated data from Rtdb.

to the common database access method. Claim 1 does not require *database responses received from a database API* as commented by the appellant. Therefore, the examiner respectfully refuses to answer to the features that are not in the claim.

In light of the Specification of the current application, to *convert database responses to the common database access method*, the response from the database is converted to common database instructions so the application may receive requested data (Specification, Page 15-Lines 16-17).

As taught by Woolard, the Rtdb server includes a real-time database (Rtdb) that may receive data from a gateway and disseminate data to the client PC (Woolard, Col. 9-Lines 29-33). Upon arrival of the changed data at the Rtdb server, the Rtdb server determines which concentrators are currently registered to receive data updates to send the updated data. When a data update is received by a concentrator, the concentrator determines which client application is registered for updated data and sends the updated data to the registered client application (Woolard, Col. 9-Line 65→Col. 10-Line 14). As shown in Woolard's FIG. 7, the associated concentrator receives updated data for a specified point from Rtdb server (Woolard, Col. 13-Lines 39-41). To provide the updates to the registered client, subroutine PointsDataCollection.OnUpdatePoint is called to update MachineID, PtlID, Value, Timestamp and Status values in the appropriate variables (Woolard, Col. 13-Lines 51-55).

In view of Woolard's teaching as discussed, data updates from the real-time database (Rtdb) is considered as being equivalent to the claimed *database responses*. The data updates from Rtdb received by the associated concentrator is transformed to subroutine PointsDataCollection.OnUpdatePoint with updated data such as MachineID, PtlID, Value, Timestamp and Status values, wherein subroutine PointsDataCollection.OnUpdatePoint is in the process of requesting/retrieving data updates, which is considered as being equivalent to the claimed *common database access method* at least in view of the Specification.

In short, Woolard's teaching reads on the claimed *convert database responses to the common database access method*.

- As argued by appellant (Brief, Page 13-Line 25→Page 14-Line 10):

The Woolard reference also fails to disclose "a design converter configured to convert application definition data into computer statements that implement control logic of application definition data" as required by claim 1. The Examiner again refers to the device data collection and reporting scheme of Woolard as meeting this limitation. This assertion, however, is not supported by references to the record that prove Woolard discloses a design converter that is configured as claimed. Indeed, the system in Woolard requires no design converter because it is a system for managing the use of energy, particularly managing energy use for a commercial user. Woolard, col. 1, lines 5-8. The system accomplishes the goal of providing users of a physical plant with a comprehensive understanding of the plant's energy consumption by using navigation tools, analytical processes, and communication capabilities to present large amounts of real-time energy data to the user. Woolard, col. 1, line 65 to col. 2, line 9. Thus, the system of Woolard does not facilitate the task of developing application solutions for building systems, which is the goal of the system set forth in claim 1. Consequently, the data and object names cited by the Examiner in the final office action do not correspond to application definition data and these names are not used to generate computer statements.

The examiner respectfully disagrees.

Firstly, the examiner respectfully refuses to answer the appellant's comments that *the system of Woolard does not facilitate the task of developing application solutions for building systems, which is the goal of the system set forth in claim 1. Features in the appellant comments, e.g., facilitate the task of developing application solutions for building systems, are not in claim 1.*

Secondly, as taught by Woolard, each site of a physical plant may have a site data structure that contains a description of the particular site and a site address. Each building or other location within a site may have a location data structure that contains location name, location address, site ID, the number of floors, the square footage, a TextureType indicating the texture that is used to render the building during the facility navigation, a DemandThreshold

indicating when an alarm is generated for a particular reading (Woolard, Col. 14-Lines 9-27). Woolard further discloses a FACILITY NAVIGATOR 42 that permits a user of the system to view real time 2-dimensional or 3-dimensional representations of any facility, to configure a particular site using advanced 2-D and 3-D visualization tools, to analyze and locate energy or facility problem at a site. The FACILITY NAVIGATOR 42 may generate graphical representations of the details of the facilities and sites to permit the user to navigate through all of the sites, through a site to a specific building on a site or through a particular building on a site. The FACILITY NAVIGATOR 42 may display a particular building as red indicating that the building is using too much power based on past history (Woolard, Col. 6-Lines 23-54).

The Woolard's teaching as discussed indicates each site or building has a schema with data for rendering and navigating. The schema data of the sites and buildings, e.g., site name, building name, texture and DemandThreshold..., is considered as being equivalent to the claimed *application definition data*. The schema data of the sites and buildings is converted by FACILITY NAVIGATOR 42 as *system design converter* to detailed graphical representations for navigating, analyzing and locating energy or facility problems. Detailed graphical representations for navigating, analyzing and locating energy or facility problems as taught by Woolard implies *computer statements* such as a "GO TO" either in language form or symbol to navigate from a current viewing site to another site. The same with an "ANALYZING" to analyze the energy usage at a current viewing site, and "LOCATING" to retrieve energy usage at a current viewing building. These detailed graphical representations *implement* navigating, analyzing and locating energy or facility problems as *control logic of* schema data of the sites and buildings as *application definition data*.

In short, the Woolard's teaching reads on the claimed limitation *a system design converter configured to convert application definition data into computer statements that implement control logic of*

application definition data, e.g., FACILITY NAVIGATOR 42 is configured to convert schema data of the sites and buildings to detailed graphical representations for navigating, analyzing and locating energy or facility problems of schema data.

- As argued by the appellant (Brief, Page 14-Lines 11-14):

The Woolard reference also fails to teach a "computer tool interface configured to provide the system design converter with data from the database through the data provider interface." Indeed, it cannot disclose such a limitation as the reference does not teach a system design converter and a data provider interface as described above.

The examiner respectfully disagrees.

Woolard teaches a *system design converter* and a *data provider interface* as discussed above. Woolard further discloses an ENERGY MANGER 40 that is coupled to FACILITY NAVIGATOR 42 (Woolard, FIG. 2). As taught by Woolard, the ENERGY MANGER 40 receive data from variety of sources, such a utility meters in the facility (Woolard, Col. 5-Lines 52-53). The ENERGY MANGER 40 may perform retrieving and comparing historical energy usage with real-time energy usage (Woolard, Col. 5-Line 66→Col. 6-Line 2). As further disclosed by Woolard, the FACILITY NAVIGATOR 42 may display a particular building as red indicating that the building is using too much power based on past history (Woolard, Col. 6-Lines 23-54). The real-time energy usage of comparing historical energy usage is part of updated data from Rtdb in RTDB SERVER (Woolard, Col. 8-Lines 26-32 and Col. 9-Lines 21-37).

The teaching from Woolard as discussed reads on the claimed limitation *a computer tool interface coupled to the system design converter*, e.g., ENERGY MANGER 40 coupled to the FACILITY NAVIGATOR 42, *the computer tool interface configured to provide the system design converter with data from the database through the data provider interface*, e.g., ENERGY MANGER 40 provides FACILITY

NAVIGATOR 42 real-time energy usage from the Rtdb through the RTDB SERVER 102 to display a particular building as red.

- As argued by appellant (Brief, Page 14-Lines 15-22)

The Woolard reference also does not disclose an "external program module interface configured to provide the system design converter with external program modules." The Examiner cites as evidence for such a teaching a portion of Woolard that simply states a client application may call a subroutine to register a request for data from a particular data point with a concentrator coupled to the application. Woolard, col. 12, lines 57-62. This description fails to identify external program modules that are provided to another component of the system in Woolard and it certainly does not teach the provision of external program modules to a design converter.

The examiner respectfully disagrees.

Woolard discloses an ALARM MANAGER 46 that is coupled to FACILITY NAVIGATOR 42 (Woolard, FIG. 2). The ALARM MANAGER 46 handles any generated alarms at any point in the system (Woolard, Col. 7-Lines 15-17). The FACILITY NAVIGATOR 42 is provided with an alarm corresponding to an event (Woolard, Col. 6-Lines 37-40).

Alarms corresponding to events are considered as being equivalent to the claimed *external program modules*. The Woolard's teaching as discussed reads on the claimed limitation *an external program module interface coupled to the system design converter*, e.g., ALARM MANAGER 46 that is coupled to FACILITY NAVIGATOR 42, *the external program module interface configured to provide the system design converter with external program modules*, e.g., ALARM MANAGER 46 provides FACILITY NAVIGATOR 42 with alarms corresponding to events.

- As argued by applicant (Brief, Page 14-Line 23→Page 15-Line 8)

Also, the Woolard reference does not teach that a design converter is further "configured to include the data obtained through the computer tool interface and the external program modules obtained through the

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external program module interface with the computer statements that implement the control logic of application definition data to generate a building system application." In the final office action, the Examiner references a section of Woolard that describes the operation of a server to provide data to client applications (col. 12, line 63 to col. 13, line 20), but it does not describe the inclusion of data obtained through a computer tool interface or the inclusion of external program modules obtained through an external program module interface with computer statements to generate a building system application. As noted above, the Woolard reference does not teach the system is used to produce application solutions. Instead, the system provides energy consumption data to a user so the user can control a physical plant system. The facility manager cited by the Examiner at col. 6, line 55 to col. 7, line 20 may be a type of a building control system, but it is not a system that segregates the application design task from the software support task as the claimed system does. Specification, paragraph [0024].

The examiner respectfully disagrees.

The examiner respectfully refuses to answer the appellant's comments that *[T]he facility manager cited by the Examiner at col. 6, line 55 to col. 7, line 20 may be a type of a building control system, but it is not a system that segregates the application design task from the software support task as the claimed system does. Specification, paragraph [0024]. Features in the appellant comments, e.g., a system that segregates the application design task from the software support task as the claimed system does, are not in claim 1.*

As discussed above regarding a computer tool interface's section, the FACILITY NAVIGATOR 42 includes real-time energy usage from ENERGY MANGER 40 to display a particular building as red. The FACILITY NAVIGATOR 42 further includes alarms corresponding to events as *external program modules* from ALARM MANAGER 46 as *external program module interface* as discussed above. The FACILITY NAVIGATOR 42 also includes *the computer statements that implement the control logic of application definition data* as discussed in *system design converter's* section and the purpose is *to generate a building system application*, e.g., to view real-time 2-D or 3-D representations of any facility in the physical plant, to analyze and locate energy or facility management problem at a site, or to generate a report (Woolard, Col. 6-Lines 26-30).

2. As argued by appellant regarding claims 1, 2, 6, 11-14, 15, 16, 19, 20 and 25-28

(Brief, Page 15-Lines 9-16):

All of these reasons prove that the Examiner has failed to provide a record with properly supported findings of fact that demonstrate that the Woolard reference teaches each and every limitation of claim 1. Because claims 2, 6, 11-14 depend from claim 1, they also include these limitations not taught by Woolard. Additionally, the limitations of claims 15, 16, 19-20, and 25-28 correspond to the limitations of claims 1, 2, 6, and 11-14. Thus, these claims are patentable for reasons similar to those presented above with reference to those claims. Therefore, the Board is respectfully requested to reverse the section 102 ground of rejection for claims 1, 2, 6, 11-16, 19-20, and 25-28.

The examiner respectfully disagrees.

Claims 2, 6 and 11-14 depend from claim 1. The limitations of claims 15, 16, 19, 20 and 25-28 correspond to the limitations of claims 1, 2, 6 and 11-14. These claims are unpatentable for at least the reasons as discussed above with respect to claim 1.

3. As argued by appellant with respect to claims 7, 8, 21 and 22 (Brief, Page 15-

Line 17→Page 16-Line 4):

Claim 7 further includes operating system communication components that are configured to couple the computer statements that implement the control logic of the application definition data to another application through the operating system and claim 8 further specifies that the operating system communication components communicate through a Windows operating system. The portion of Woolard cited by the Examiner (col. 9, lines 38-44) simply indicates the client applications may communicate over the Internet with the server 102. The Examiner has failed to prove how the use of a browser is a teaching with regard to the coupling of computer statements that implement the control logic of application definition data to another application through operating system communication components or through a Windows operating system. Claims 21 and 22 include limitations similar to these limitations discussed with reference to claims 7 and 8, respectively. Thus, the Board is asked to overturn the section 102 ground of rejection with respect to claims 7-8 and 21- 22 separately from the reversal of the other allegedly anticipated claims.

The examiner respectfully disagrees.

As discussed in *system design converter's* section, FACILITY NAVIGATOR 42 as *system design converter* includes *the computer statements that implement the control logic of application definition data*.

As further taught by Woolard, each client PC 104, 106 or 108 may include client objects, which may be software applications being executed by the client PC (Woolard, Col. 9-Lines 38-44). The FACILITY NAVIGATOR 42 permits any user of the energy and facility management apparatus to analyze and locate energy at a site (Woolard, Col. 6-Lines 23-30).

In view of Woolard's teaching of executing software applications by a client PC, *an operating system* such as conventional Windows 95 and system calls of the operating system such as OPEN, READ, WRITE, CLOSE, EXEC as *operating system communication components* are inherited features of a conventional computer. Analyzing and locating energy at a site is considered as being equivalent to *another application*.

In short, the Woolard's teaching reads on the limitations of

Claims 7 and 8: *operating system communication components configured to couple the computer statements that implement the control logic of the application definition data to another application through an operating system*, e.g., system calls of an operating system are used to couple *computer statements that implement the control logic of the application definition data* such as "ANALYZING" and "LOCATING" to analyzing and locating energy application, and *the operating system communication components communicate through a Windows operating system*, e.g., system calls such as OPEN, READ, WRITE, CLOSE, EXEC are communicated through a convention Windows operating system such as Windows 95.

And claims 21-22: *coupling the computer statements for implementing control logic of application definition data to another application through an operating system communication component for supporting application communication through the operating system*, e.g., "ANALYZING" and "LOCATING" coupled to analyzing and locating energy application through a system call such as EXEC for

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supporting communication of FACILITY NAVIGATOR 42 through a conventional operating system, and *coupling a Window-based communication component to the computer statements for implementing control logic of application definition data*, e.g., "ANALYZING" and "LOCATING" are coupled to a system call such as EXEC.

4. As argued by appellant with respect to claims 9 and 23 (Brief, Page 16-Lines 5-18):

Claim 9 further requires the Web-based components to couple the computer statements for the application solution to another application over the Internet through a customer web portal. The Examiner cites the same portion of Woolard discussed above with reference to claims 7 and 8 (col. 9, lines 38-44). This section makes no reference to a web portal of any type and a browser does not constitute a web portal as that term is understood by one of ordinary skill in the art. Indeed, the Examiner has failed to enter into the record any evidence of correlation between a browser and a web portal. Thus, the Examiner has failed to prove that Woolard discloses a customer web portal having the limitations required by claim 9. Claim 23 includes a similar limitation. Therefore, the Board is asked to overturn the section 102 ground of rejection with respect to claims 9 and 23 separately from the reversal requested for the other allegedly anticipated claims.

The examiner respectfully disagrees.

As discussed in *system design converter's* section, FACILITY NAVIGATOR 42 as *system design converter* includes the computer statements that implement the control logic of application definition data such as "ANALYZING" and "LOCATING" statements.

As taught by Woolard, clients PCs are connected to the system via the Internet (Woolard, Col. 4-Lines 48-51). Each client PC sends request for data to CENTRAL SERVER 102 using an Internet browser (Woolard, Col. 9-Lines 38-44 and Col. 8-Lines 54-65). The system 100 interfaces to and consolidates data from a variety of different systems having possible different data protocols into a CENTRAL DATA SERVER (Woolard, Col. 8-Lines 40-45).

The Internet browser with multiple features is considered as being equivalent to the claimed *Web-based components*. The CENTRAL SERVER 102 is considered as being equivalent to the claimed *a customer web portal*³.

The Woolard' teaching as discussed indicates the claimed limitation *the Web-based components couple the computer statements that implement the control logic of the application definition data to another application over the Internet through a customer web portal*, e.g., Internet browser couples "ANALYZING" and "LOCATING" statements to analyzing and locating energy application over the Internet through the CENTRAL SERVER 102.

5. As argued by appellant with respect to claims 10 and 24 (Brief, Page 16-Line 19→Page 17-Line 5):

Claim 10 further includes "a configuration utility configured to develop a file structure representative of a building system and to associate configuration data with components identified in the file structure." The Examiner fails to show how Woolard discloses such a utility. Woolard only discloses a configuration database 129 and the only reference to this database states that the database may receive configuration data from a gateway for a particular device and forward updated configuration data to a device and gateway. This sparse description does not identify a utility configured to develop a file structure representative of a building or specify the operation of the utility to associate configuration data with components identified in the file structure. The limitation of claim 24 is similar to this limitation of claim 10. Thus, the Board is asked to overturn the section 102 ground of rejection with respect to claims 10 and 24 separately from the reversal requested for the other allegedly anticipated claims.

The examiner respectfully disagrees.

Woolard's FIG. 8 illustrates examples of various data structures utilized by the server (Woolard, Col. 14-Lines 5-7), wherein the location data structure represents a building system

³ According to Wikipedia <http://en.wikipedia.org/wiki/Web_portal>, a web portal presents information from diverse sources in a unified way. The CENTRAL SERVER 102 as taught by Woolard is a web portal by definition.

(Woolard, Col. 14-Lines 13-27) is developed. Woolard further discloses the location data structures includes a Tag variable containing a unique short name for the building, a Location ID variable containing a unique address of the location (building), a SiteID variable containing a unique address of the site... (Woolard, Col. 14-Lines 13-27).

The unique short name for the building, unique address of the location (building) and unique address of the site as taught by Woolard are considered as being equivalent to the claimed *configuration data*. The Tag variable, Location ID variable and SiteID variable are considered as being equivalent to the claimed *components identified in the file structure*.

In short, the Woolard's teaching as discussed indicates *a configuration utility configured to develop a file structure representative of a building system*, e.g., location data structure is developed for a building system, *and to associate configuration data with components identified in the file structure*, e.g., unique short name for the building, unique address of the location (building) and unique address of the site are associated with Tag variable, Location ID variable and SiteID variable.

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As argued by appellant with respect to claims 3-5 and 17-18 (Brief, Page 17-Lines 6-13):

The obviousness rejection of claims 3-5 and 17-18 are based on combinations that use Woolard for a foundational basis. As discussed above, Woolard fails to disclose a number of limitations that the Examiner asserts are present in the reference. If the Board finds that at least one of these limitations is not present in Woolard, then the section 103 ground of rejection of claims 3-5 and 17-18 should also be reversed. Thus, claims 3-5 and 17-18 stand or fall with claims 1-2, 6, 11-16, 19-20, and 25-28.

The examiner respectfully disagrees.

As discussed above, Woolard teaches every limitation in the rejection under 35 U.S.C. § 102. Therefore, claims 3-5 and 17-18 are unpatentable for at least the reasons as discussed above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/HUNG Q. PHAM/

Primary Examiner, Art Unit 2159

September 17, 2009

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